

Diesel Exhaust Fluid

Warning: Diesel Exhaust Fluid (DEF) is corrosive. Do not allow it to come in contact with your skin, eyes, or the finished surfaces of the vehicle. If exposed, it may cause skin and eye irritation. Wear skin and eye protection when handling. Inhalation may cause irritation to the upper respiratory tract. Store in a cool, well-ventilated area. For more safety information, see the label of the Diesel Exhaust Fluid container.

Diesel Exhaust Fluid (DEF) is used with diesel engines to reduce the amount of regulated emissions produced. The fluid level in the DEF tank must be maintained for the vehicle to run correctly. The capacity of the DEF tank is 20.1 L (5.3 gal).

Locating Diesel Exhaust Fluid

DEF can be purchased at a Chevrolet or GMC dealer. It can also be purchased at authorized vehicle and truck dealerships. Additionally, some diesel truck fuelling stations or retailers may also have DEF for purchase. For vehicles with an active OnStar subscription, OnStar can help to locate a DEF retailer. For more information on locating DEF see www.afdc.energy.gov/afdc/vehicles/diesels_fluid.html. See "Customer Assistance Offices" in the owner manual for phone numbers to assist in contacting a GM dealer. See [Recommended Fluids and Lubricants](#).

Filling the DEF Tank

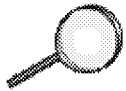
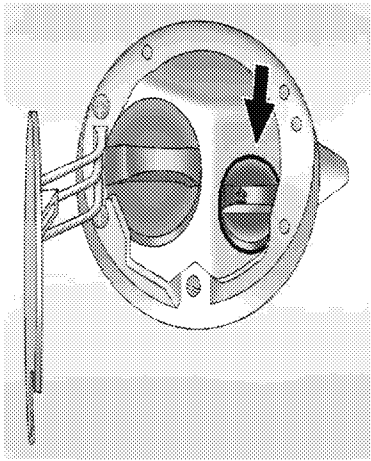
Notice: Use only exhaust fluid that is GM approved, or fluid containing the API certified or ISO 22241 label. The use of other fluids could damage the system, requiring costly repairs that will not be covered by the vehicle warranty.

When adding DEF to an empty or very low tank, always add at least 7.6 liters (2 gal) of fluid to release the vehicle from speed limitation.

Do not over fill the DEF tank. When fluid reaches the top of the fill pipe, stop filling. Do not top off the DEF tank.

If DEF is spilled on the vehicle, rinse the area with water and wipe the surface with a damp cloth.

DEF Fill - Vans



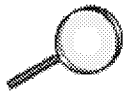
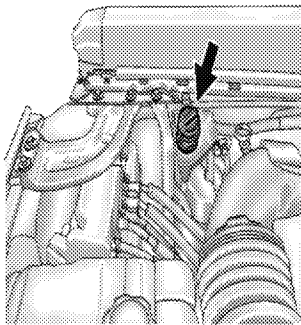
For vans, the DEF fill is located behind the fuel fill door. The DEF cap is blue, and diesel cap is green.

Fill tube location for chassis-cab and cutaway vans finished by an upfitter will vary. Check the upfitters manual.

8

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DEF Fill - Pickups



For full sized pickups, the DEF fill is located under the hood, on the passenger side, at the back of the engine compartment. The DEF cap is blue.

Exhaust Fluid Low Warnings

A full DEF tank will last for several thousand kilometers (miles), depending on vehicle usage. As the exhaust fluid level drops, Driver Information Center (DIC) warnings will display. There will not be any DEF range DIC messages with more than 1600 km (1000 mi) of DEF range remaining. DIC messages will begin with approximately 1600 km (1000 mi) of range, and as the tank becomes empty, vehicle speed limitation will result.

To avoid vehicle speed limitations, the DEF tank should be refilled at the first opportunity after a low warning indication. If DEF is added before the EXHAUST FLUID EMPTY message appears, it may take several km/mi for the DIC message to update.

If the vehicle speed has been limited and DEF has been added, it may take up to 30 seconds after engine start with the vehicle stopped for the EXHAUST FLUID EMPTY message to clear. If the vehicle is driven prior to the DIC message clearing, the vehicle speed will still be limited. If the DIC message clears while driving, the speed limitation will be removed gradually.

If DEF is added under freezing conditions, additional time may be required to remove speed limitations and may require less fluid to fill the DEF tank.

The DIC message EXHAUST FLUID RANGE: XXX displays at approximately 1600 km (1000 mi) of fluid range remaining. This message appears again at approximately 500 km (300 mi) of remaining range before the exhaust fluid tank becomes empty.

Below 500 km (300 mi) of range remaining, these messages will appear every time the vehicle is started.

If these warnings are ignored and the DEF tank becomes empty, the DIC message EXHAUST FLUID EMPTY REFILL NOW - 644 KM (400 MI) UNTIL 105 KM/H (65 MPH) MAX SPEED displays. The displayed mileage will decrease as driving continues. A warning light also comes on.

When the mileage countdown is zero, the DIC message EXHAUST FLUID EMPTY REFILL NOW - TRANSITIONING TO 105 KM/H (65 MPH) MAX SPEED displays. A warning light and a chime also come on. Vehicle speed will be reduced to a maximum speed limit of 105 km/h (65 mph).

After the transition to 105 km/h (65 mph) is complete, the DIC message EXHAUST FLUID EMPTY REFILL NOW - SPEED LIMITED TO 105 KM/H (65 MPH) - 120 KM (75 MI) UNTIL 89 KM/H (55 MPH) MAX SPEED displays. The displayed mileage will decrease as driving continues. A warning light and a chime also come on.

When the mileage countdown is zero, the DIC message EXHAUST FLUID EMPTY REFILL NOW - TRANSITIONING TO 89 KM/H (55 MPH) MAX SPEED displays. A flashing warning light and a chime also come on. Vehicle speed will be reduced to a maximum speed limit of 89 km/h (55 mph).

After the transition to 89 km/h (55 mph) is complete, the DIC message EXHAUST FLUID EMPTY REFILL NOW - SPEED LIMITED TO 89 KM/H (55 MPH) - 120 KM (75 MI) UNTIL 7 KM/H (4 MPH) MAX SPEED displays. The displayed mileage will decrease as driving continues. A flashing warning light and a chime also come on.

When the mileage countdown is zero, the DIC message EXHAUST FLUID EMPTY REFILL NOW - TRANSITIONING TO 7 KM/H (4 MPH) MAX SPEED displays. A flashing warning light and a chime also come on. Vehicle speed will be reduced to a maximum speed limit of 7 km/h (4 mph).

After the transition to 7 km/h (4 mph) is complete, the DIC message EXHAUST FLUID EMPTY REFILL NOW - SPEED LIMITED TO 7 KM/H (4 MPH) displays. A flashing warning light and a chime also come on.

Add at least 7.6 liters (2 gal) of fluid to release the vehicle from speed limitation from a very low or empty tank. The capacity of the DEF tank is 20.1 L (5.3 gal).

See Vehicle Messages , Diesel Exhaust Fluid (DEF) Warning Light and Recommended Fluids and Lubricants for more information.

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Exhaust Fluid Quality Poor

Use only exhaust fluid that is GM approved, or fluid containing the API certified or ISO 22241 label.

All DEF has an expiration date. If the system detects poor quality, contaminated or diluted DEF, the EXHAUST FLUID QUALITY POOR - SEE OWNERS MANUAL NOW - 160 KM (99 MI) UNTIL 105 KM/H (65 MPH) MAX SPEED DIC message displays. The displayed mileage will decrease as driving continues. A warning light also comes on. Adding fresh DEF to the system may resolve the problem, depending on several factors. If the DIC message persists, see your dealer or additional DIC messages.

When the mileage countdown is zero, a DIC message EXHAUST FLUID QUALITY POOR - SEE OWNERS MANUAL NOW - TRANSITIONING TO 105 KM/H (65 MPH) MAX SPEED displays. A warning light and a chime also come on. Vehicle speed will be reduced to a maximum speed limit of 105 km/h (65 mph).

After the transition to the 105 km/h (65 mph) is complete, the DIC message EXHAUST FLUID QUALITY POOR - SEE OWNERS MANUAL NOW - SPEED LIMITED TO 105 KM/H (65 MPH) - 120 KM (75 MI) UNTIL 89 KM/H (55 MPH) MAX SPEED displays. The displayed mileage will decrease as driving continues. A warning light and a chime also comes on.

When the mileage countdown is zero, the DIC message EXHAUST FLUID QUALITY POOR - SEE OWNERS MANUAL NOW - TRANSITIONING TO 89 KM/H (55 MPH) MAX SPEED displays. A flashing warning light and a chime also come on. Vehicle speed will be reduced to a maximum speed limit of 89 km/h (55 mph).

After the transition to 89 km/h (55 mph) is complete, a DIC message EXHAUST FLUID QUALITY POOR - SEE OWNERS MANUAL NOW - SPEED LIMITED TO 89 KM/H (55 MPH) - 120 KM (75 MI) UNTIL 7 KM/H (4 MPH) MAX SPEED displays. The displayed mileage will decrease as driving continues. A flashing warning light and a chime also come on.

When the mileage countdown is zero, a DIC message EXHAUST FLUID QUALITY POOR - SEE OWNERS MANUAL NOW - TRANSITIONING TO 7 KM/H (4 MPH) MAX SPEED displays. A flashing warning light and a chime also come on. Vehicle speed will be reduced to a maximum speed limit of 7 km/h (4 mph).

After the transition to 7 km/h (4 mph) is complete, a DIC message EXHAUST FLUID QUALITY POOR - SEE OWNERS MANUAL NOW - SPEED LIMITED TO 7 KM/H (4 MPH) displays. A flashing warning light and a chime also come on.

Service Exhaust Fluid System

If a problem occurs with the DEF system, the DIC message SERVICE EXHAUST FLUID SYSTEM - SEE OWNERS MANUAL NOW - 160 KM (99 MI) UNTIL 105 KM/H (65 MPH) MAX SPEED displays. The displayed mileage will decrease as driving continues. A warning light also comes on. In some cases this message will clear itself, indicating that the DEF system was able to correct the condition. If the DIC message persists, see your dealer or additional DIC messages may display.

When the mileage countdown is zero, the DIC message SERVICE EXHAUST FLUID SYSTEM - SEE OWNERS MANUAL NOW - TRANSITIONING TO 105 KM/H (65 MPH) MAX SPEED displays. A warning light and a chime also come on. Vehicle speed will be reduced to a maximum speed limit of 105 km/h (65 mph).

After the transition to 105 km/h (65 mph) is complete, a DIC message SERVICE EXHAUST FLUID SYSTEM - SEE OWNERS MANUAL NOW - SPEED LIMITED TO 105 KM/H (65 MPH) - 120 KM (75 MI) UNTIL 89 KM/H (55 MPH) MAX SPEED displays. The displayed mileage will decrease as driving continues. A warning light and a chime also come on.

When the mileage countdown is zero, the DIC message SERVICE EXHAUST FLUID SYSTEM - SEE OWNERS MANUAL NOW - TRANSITIONING TO 89 KM/H (55 MPH) MAX SPEED displays. A flashing warning light and a chime also come on. Vehicle speed will be reduced down to a maximum speed limit of 89 km/h (55 mph).

After the transition to 89 km/h (55 mph) is complete, the DIC message SERVICE EXHAUST FLUID SYSTEM - SEE OWNERS MANUAL NOW - SPEED LIMITED TO 89 KM/H (55 MPH) - 120 KM (75 MI) UNTIL 7 KM/H (4 MPH) MAX SPEED displays. The displayed mileage will decrease as driving continues. A flashing warning light and a chime also come on.

When the mileage countdown is zero, the DIC message SERVICE EXHAUST FLUID SYSTEM - SEE OWNERS MANUAL NOW - TRANSITIONING TO 7 KM/H (4 MPH) MAX SPEED displays. A flashing warning light and a chime also come on. Vehicle speed will be reduced to a maximum speed limit of 7 km/h (4 mph).

After the transition to 7 km/h (4 mph) is complete, the DIC message SERVICE EXHAUST FLUID SYSTEM - SEE OWNERS MANUAL NOW - SPEED LIMITED TO 7 KM/H (4 MPH) displays. A flashing warning light and a chime also come on.

Service Emission System

If a problem occurs with the vehicle emission system, the DIC message SERVICE EMISSION SYSTEM - SEE OWNERS MANUAL NOW - 282 KM (175 MI) UNTIL 105 KM/H (65 MPH) MAX SPEED displays. The displayed mileage will decrease as driving continues. In some cases this message will clear itself, indicating that the emission system was able to correct the condition. If the DIC message persists, see your dealer or additional DIC messages may display.

When the mileage countdown is zero, the DIC message SERVICE EMISSION SYSTEM - SEE OWNERS MANUAL NOW - TRANSITIONING TO 105 KM/H (65 MPH) MAX SPEED displays. A chime also comes on. Vehicle speed will be reduced to a maximum speed limit of 105 km/h (65 mph).

After the transition to 105 km/h (65 mph) is complete, the DIC message SERVICE EMISSION SYSTEM - SEE OWNERS MANUAL NOW - SPEED LIMITED TO 105 KM/H (65 MPH) - 120 KM (75 MI) UNTIL 89 KM/H (55 MPH) MAX SPEED displays. The displayed mileage will decrease as driving continues. A chime also comes on.

When the mileage countdown is zero, the DIC message SERVICE EMISSION SYSTEM - SEE OWNERS MANUAL NOW - TRANSITIONING TO 89 KM/H (55 MPH) MAX SPEED displays. A chime will also come on. Vehicle speed will be reduced to a maximum speed limit of 89 km/h (55 mph).

After the transition to 89 km/h (55 mph) is complete, the DIC message SERVICE EMISSION SYSTEM - SEE OWNERS MANUAL NOW - SPEED LIMITED TO 89 KM/H (55 MPH) displays. A chime will also come on.

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